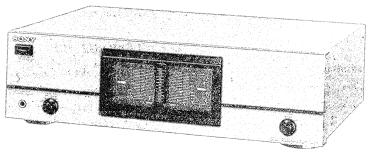
TA-N721

SERVICE MANUAL

US Model Canadian Model E Model



SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC
DISTORTION:

With 8-ohm loads, both channels driven, from 20 - 20,000 Hz; rated 135 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power bandwidth (IHF)

7 Hz - 30 kHz (8 ohms)

Overall output (1 kHz)

135 W + 135 W (front, at rear/center

off at 8 ohms)

25 W + 25 W (rear, at front/center off at 8 ohms)

50 W (center, at front/rear off at 4 ohms)

Harmonic distortion

Less than 0.9% (at 1 kHz, 8 ohms loads, front: 135 W + 135 W, rear/center off)

Intermodulation (IM) distortion (60 Hz : 7 kHz)

Less than 0.9 % at rated output

Frequency response

INPUT (FRONT/REAR/CENTER):

10 Hz - 70 kHz ±3 dB 1 V (50 kilohms)

Input sensitivity 1
Damping factor 4

40 (8 ohms, 1 kHz)

Signal-to-noise ratio

atio

Output

FRONT SPEAKER and REAR SPEAKER: Accepts speakers of 8 - 16 ohms.

CENTER SPEAKER:

Accepts speaker of 4 - 16 ohms

HEADPHONES:

Accepts low and high impedance

General

Weight

Power requirements

US, Canadian Model: 120V AC, 60Hz

E Model: 120/220/240 V AC, 50/60Hz

Power consumption

US Model: 250W

E Model: 265W

Dimensions Approx. $430 \times 130 \times 345 \text{ mm (w/h/d)}$

(17 x 5¹/₈ x 13⁵/₈ inches)

(including projecting parts and controls)

Approx. 9.5 kg (20 lb 15 oz)

Design and specifications are subject to change without notice.

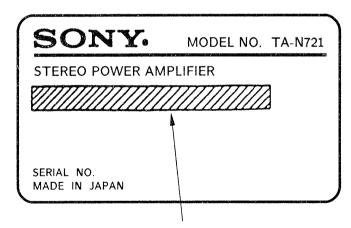


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5 FLECTRICAL PARTS	SIIST	

MODEL IDENTIFICATION

- Specification Label -



US Model: AC: 120V 60Hz 250W Canadian Model: AC: 120V 60Hz 370VA

E Model: AC: 120/220/240V~50/60Hz 265W

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK A OR DOTTED LINE WITH MARK A ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

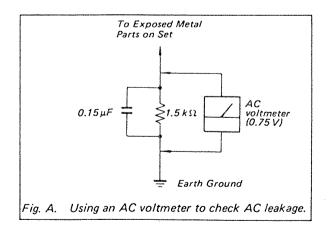
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



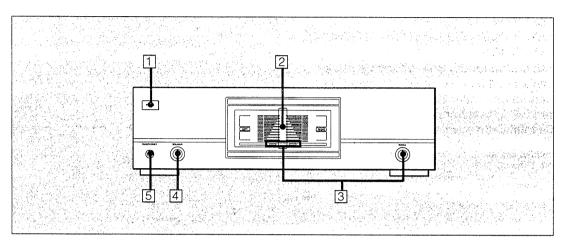
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

Function of Controls



POWER switch

Press to turn ON or OFF the unit.

To control the power of the unit with the power switch (SYSTEM POWER) of the AV control amplifier, connect the power cord of the unit to the switched AC outlet of the AV control amplifier and usually set the POWER switch of the unit to ON.

2 Peak power meters

Indicate the peak power levels of the LEFT and RIGHT channels independently.

3 RANGE selector and indicators

Select the range of the peak power meters:

- x1: Peak power level is indicated by the scales (for use when listening at the high volume level).
- x1/10: Peak power level is indicated by 1/10 of the scales (for use when listening at the low volume level).

4 SPEAKERS selector

Select the speaker system to be used.

A: To drive speaker system A.

B: To drive speaker system B.

A+B: To drive both speaker systems A and B.

OFF: For headphones listening only.

Notes

- Speaker systems A and B are series connected.
 No sound can be heard if the SPEAKERS selector is set to A+B when only one speaker system is connected.
- The sound of the rear (surround) or center (Dolby* Pro Logic) speakers can be heard only when surround mode is selected on the AV control amplifier.
- * Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792, and 3,959,590. Canadian numbers 1,004,603 and 1,037,887. ¹DOLBY¹ and the double-D symbol III are trademarks of Dolby Laboratories Licensing Corporation.

5 HEADPHONES jack (stereo phone jack)

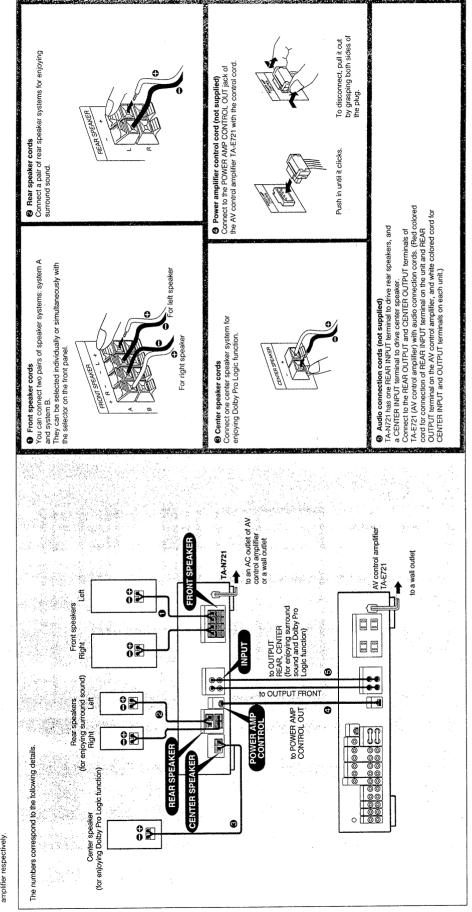
Connect headphones for listening the sound of front speakers.

Notes

- After setting the volume level to minimum on the AV control amplifier, connect headphones.
- The sound of rear and center speakers cannot be heard from headphones.
- When using headphones, set the SPEAKERS selector on the front panel and the surround mode switch on the AV control amplifier to off so that sound may not be output from the front, rear, or center speakers.

Connections

- Connect the AC power cord last. Make sure power is off.
 Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) of the FRONT INPUT errinals and white ones for the Channel (L) of that terminals. And also, red plugs and jacks are for REAR terminal and white ones for CENTER terminal.
- The cable connectors should be fully inserted into the Jacks. A loose connection may cause hum and noise.
 The + and cords of the speaker systems should be correctly connected to the + and terminals of the amplifier respectively



SECTION 2 ELECTRICAL MEASUREMENTS

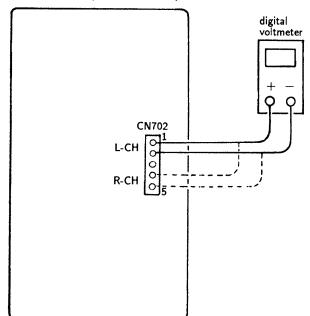
DC Bias Measurement

Note: Measure the idling voltage after tuning the unit on for about 10 minutes, giving it time to warm up.

- 1. Connect the digital voltmeter to CN702 on main board as shown in below drawing.
- 2. Measure the idling voltage so that the digital voltmeter on signal reads 0.2 - 6mV CN702 LCH and RCH. (with no signal input)

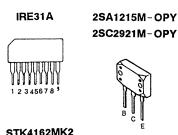
Measurement Location:

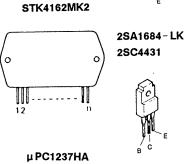
MAIN BOARD (component side)

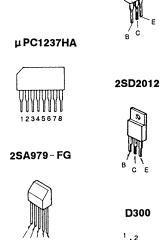


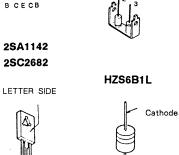
SECTION 3 DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

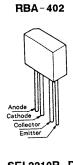


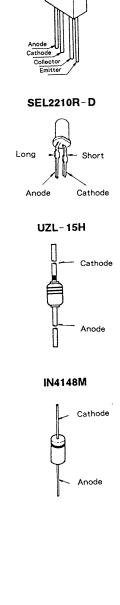






Anode





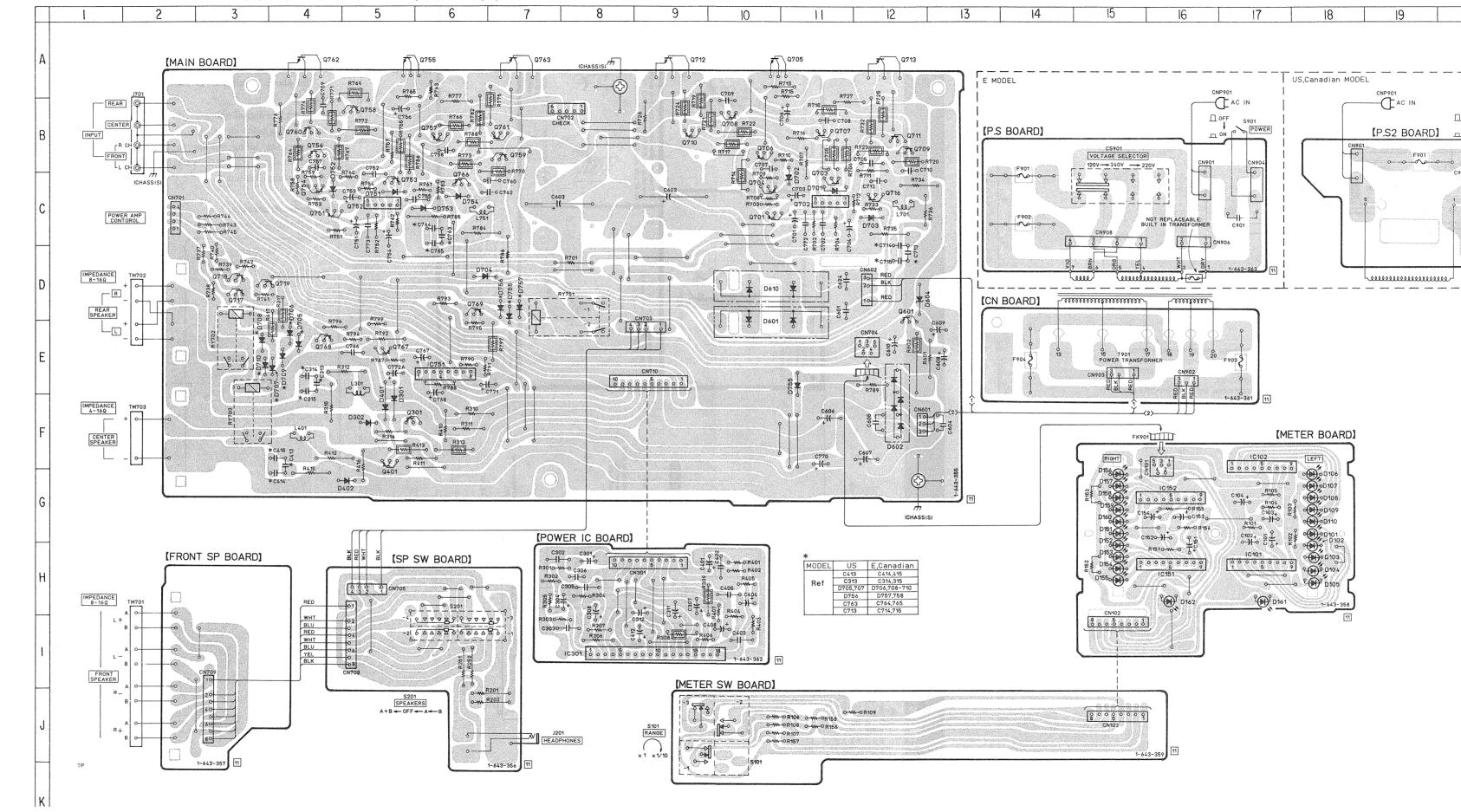
3-2. PRINTED WIRING BOARDS •See page 5 for Semiconductor Lead Layouts. •See page 12 for circuit Boards Locations.

•	Semicono	ductor Lo	cation	
	Ref. No.	Location	Ref. No.	Location
	D101	G-18	D758	D-7
	D102 D103	H-18 H-18	IC101	H-17
	D103	H-18	IC101	F-17
	D105	H-18	IC151	H-16
	D106	G-18	IC152	G-16
	D107 D108	G-18 G-18	1C301 1C751	I-8 F-6
	0100	0.10	10131	

D109
D110
D151
D152
D153
D154
D155
D156
D157
D158
D160
D161
D402
D301
D402
D601
D402
D601
D701
D702
D703
D704
D705
D706
D707
D708
D709
D710
D751
D752
D753
D754
D755
D756 0301
0401
0701
0701
0702
0703
0704
0705
0706
0707
0708
0710
0711
0712
0713
0716
0717
0718
0719
0751
0752
0753
0754
0755
0756
0757
0758
0760
0761
0762
0763
0766 E-3 C-5 C-4 C-6 C-6 E-11 D-7 D-7

Note on PRINTED WIRING BOARDS

- O : Parts extracted from the component side.
- o o : Jumper wire connected to the ground pattern on the component side.
- Pattern on the side which is seen.

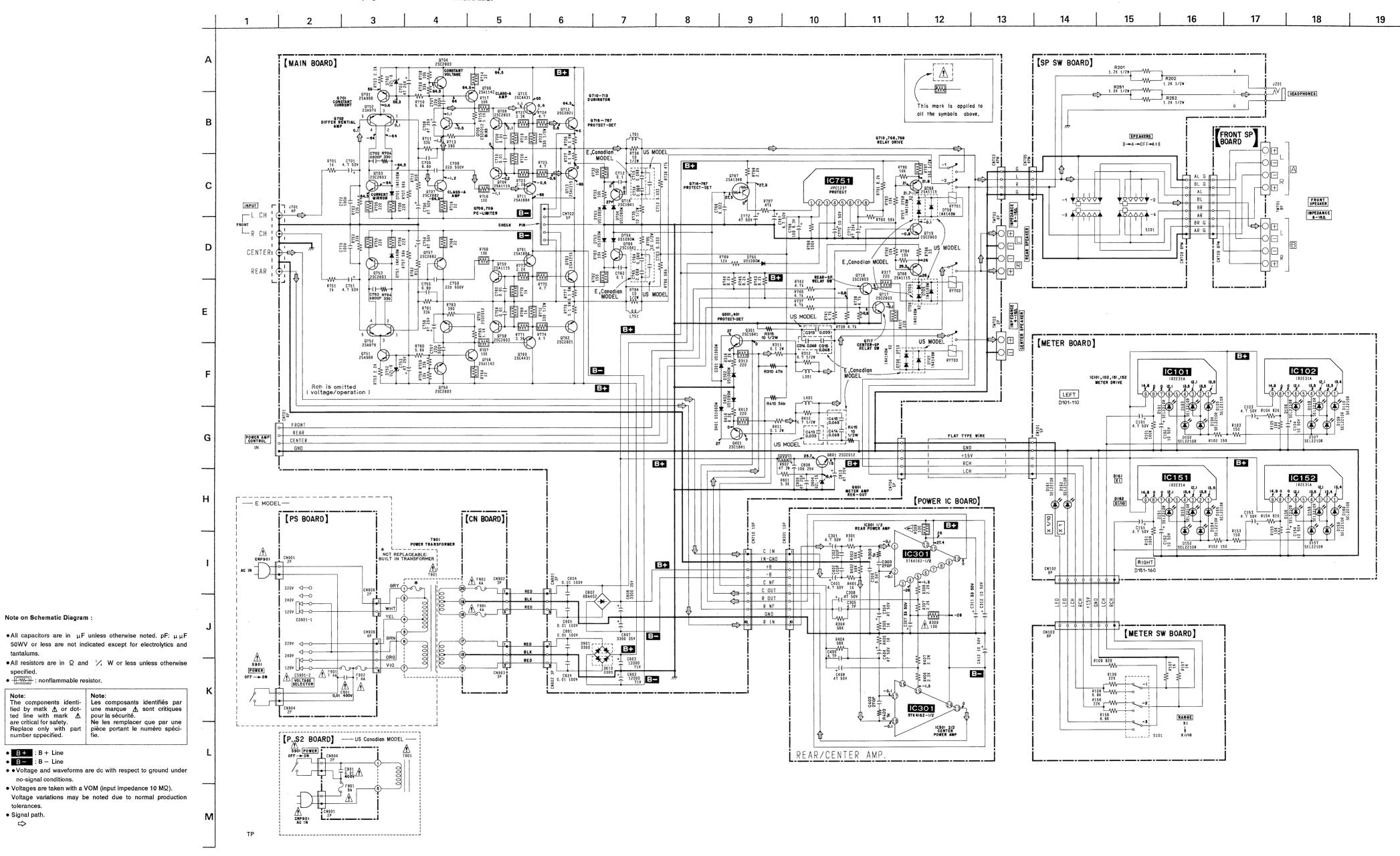


-7-

20

-8-

21



Note on Schematic Diagram:

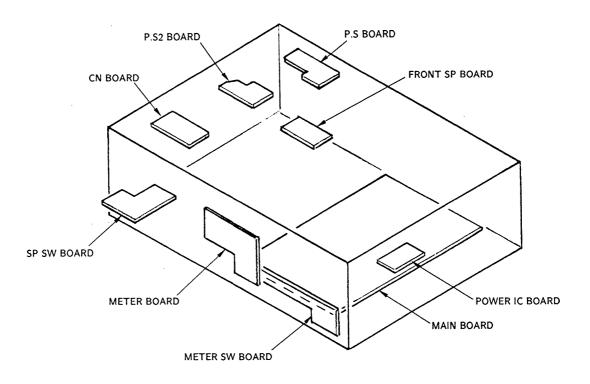
• monflammable resistor.

• B+ : B + Line • B- : B - Line

tolerances. Signal path. \Rightarrow

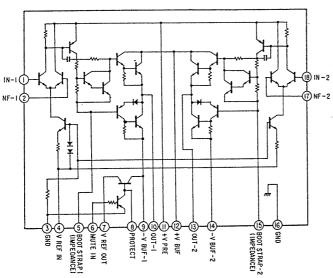
no-signal conditions.

3-4. CIRCUIT BOARDS LOCATION

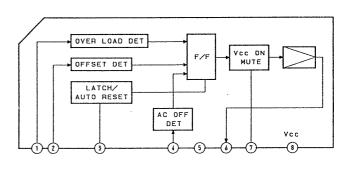


3-5. IC BLOCK DIAGRAMS

● IC301 STK-4162MK2



● IC751 UPC1237HA



SECTION 4 EXPLODED VIEWS

NOTE:

- XX, X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE)...(RED)

Parts color Cabinet's color

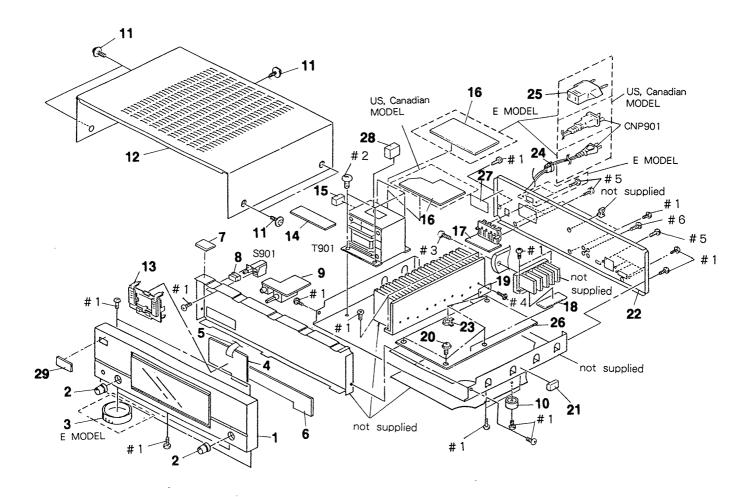
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque 🛕 sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spéci-fie.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-4942-292-1	PANEL ASSY, FRONT (US, Cana	dian)	19	4-885-901-31	SHEET, RADIATION	
1	X-4942-293-1	PANEL ASSY, FRONT (E)		20	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
				21	9-911-840-XX	CUSHION	
2	4-943-420-11	KNOB (DIA. 19)					
* 3	4-929-030-11	RING (DIA. 58A), ORNAMENTAL	(E)	* 22	4-949-956-01	PANEL, BACK (US)	
* 4	1-643-358-11	METER, BOARD		* 22	4-949-956-11	PANEL, BACK (E)	
5	1-575-662-11	WIRE, FLAT TYPE (5 CORE)	1	* 22	4-949-956-21	PANEL, BACK (Canadian)	
* 6	1-643-359-11	METER SW, BOARD					
				* 23	4-942-204-01	PLATE, GRAND	
7	9-911-841-XX	CUSHION					
8	3-354-912-01	KNOB, POWER		* 24	3-703-244-00	BUSHING (2104), CORD (US, Canad	ian)
* 9	1-643-356-11	SP, SW BOARD		* 24	3-703-571-11	BUSHING (S) (4516), CORD (E)	
10	4-933-601-01	FOOT					
11	3-704-366-01	SCREW (CASE) (M3X8)		<u>^</u> 25	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
* 12	4-924-920-71	CASE		* 26	A-4347-311-A	MAIN BOARD, COMPLETE (US)	
* 13	4-945-827-01			* 26	A-4347-319-A	MAIN BOARD, COMPLETE (Canadian)
* 14	1-643-361-11	•		* 26	A-4347-321-A	MAIN BOARD, COMPLETE (E)	
* 15	3-720-698-01	SPACER (SMALL), NA					
				* 27	3-703-044-26	LABEL, CAUTION (US, Canadian)	
* 16	1-643-363-11	P. S BOARD (E)		28	9-911-843-XX	CUSHION	
* 16	1-643-360-11	P, S 2 BOARD (US, Canadian)		29	4-925-334-11	EMBLEM (5-A), SONY (E)	
* 17	1-643-357-11	FRONT SP, BOARD		∆ CNP901	1-574-902-11	CORD, POWER (E)	•
			1	∆ CNP901	1-590-771-11	CORD, POWER (US, Canadian)	
* 18	A-4347-313-A	POWER IC BOARD, COMPLETE	(US)	 ∆S901	1-554-538-00	SWITCH, PUSH (AC POWER) (1 KEY)	
* 18		POWER IC BOARD, COMPLETE					
* 18		POWER IC BOARD, COMPLETE		 ↑T901	1-450-803-11	TRANSFORMER, POWER (US)	
10	101, 000 11		` '	 ↑T901	1-450-804-11	TRANSFORMER, POWER (E)	
					1-450-829-11	TRANSFORMER, POWER (Canadian)	

SECTION 5 ELECTRICAL PARTS LIST

CN MAIN

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number

specified.

Les composants identifiés par une marque 🛕 sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spéci-fie.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS

All resistors are in ohms.

METAL: metal-film resistor

METAL OXIDE: Metal Oxide-film

resistor

F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
 In each case, u: μ, for example: uA...: μA..., uPA..., μPA..., uPB..., μPC..., μPC...
- uPD..., μ PD...
 CAPACITORS:

uF: μF

• COILS uH: μH

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Descript	ion			Remark
*	1-643-361-11	CN BOARD		***************************************	C624	1-106-367-00	MYLAR	 0.	01uF	5%	200V
		*****		•	C701	1-124-927-11	ELECT	4.	7uF	20%	100V
					C702	1-162-292-31	CERAMIC	68	80PF	10%	50V
		< FUSE >			C703	1-126-750-11	ELECT	4	7uF	20%	25V
					C704	1-124-910-11	ELECT	47	7uF	20%	50V
♠F903	1-532-350-00	FUSE 4A 250V (E)									
 F903	1-576-108-11	FUSE 4A 125V (US,	Canadian)		C705	1-162-197-31	CERAMIC	6.	. 8PF	10%	50V
			•		C706	1-126-750-11	ELECT	4	7uF	20%	25V
♠F904	1-532-350-00	FUSE 4A 250V (E)			C707	1-161-959-00	CERAMIC		2PF	10%	500V
♠ F904	1-576-108-11	FUSE 4A 125V (US,	Canadian)		C708	1-161-959-00	CERAMIC	22	2PF	10%	500V
					C709	1-130-483-00	MYLAR	0.	01uF	5%	50V
******	******	******	*******	*****			1				
					C710	1-130-483-00	•		. 01uF	5%	50V
*		MAIN BOARD, COMPL			C712	1-130-495-00	MYLAR		. 1uF	5%	50V
*		MAIN BOARD, COMPL		lian)	C713	1-130-489-00	MYLAR	0.	. 033uF	5%	50V (US)
*	A-4347-321-A	MAIN BOARD, COMPL	ETE (E)		C714	1-130-493-00	MYLAR	0.068uF	5%		Canadian, E)
		*****	*******	****	C715	1-130-493-00	MYLAR	0.068uF	5%	50V (0	Canadian, E)
*	4-942-204-01	PLATE, GROUND			C751	1-124-927-11	ELECT	4.	. 7uF	20%	100V
*	4-945-829-01	HOLDER, LED			C752	1-162-292-31	CERAMIC	68	80PF	10%	50V
					C753	1-126-750-11	ELECT	4'	7uF	20%	25V
		< CAPACITOR >			C754	1-124-910-11	ELEÇT	4	7uF	20%	50V
					C755	1-162-197-31	CERAMIC	6.	. 8PF	10%	50V
C313	1-130-489-00	MYLAR 0.0	33uF 5%	50V (US)							
C314	1-130-493-00	MYLAR 0.068uF	5% 50'	/(Canadian, E)	C756	1-126-750-11	ELECT	4	7uF	20%	25V
C315	1-130-493-00	MYLAR 0.068uF	5% 50	/(Canadian, E)	C757	1-161-959-00	CERAMIC	2	2PF	10%	500V
					C758	1-161-959-00	CERAMIC	2:	2PF	10%	500V
C413	1-130-489-00	MYLAR 0.0	33uF 5%	50V (US)	C759	1-130-483-00	MYLAR	0.	. 01uF	5%	50V
C414	1-130-493-00	MYLAR 0.068uF	5% 50'	/(Canadian, E)	C760	1-130-483-00	MYLAR	0.	. 01uF	5%	50V
C415	1-130-493-00	MYLAR 0.068uF	5% 50	/(Canadian, E)							
					C762	1-130-495-00			. 1uF	5%	50V
C601	1-106-367-00	MYLAR 0.0	1uF 5%	200V	C763	1-130-489-00			. 033uF	5%	50V (US)
C602	1-125-573-11	ELECT (BLOCK) 120	00uF 20	6 71V	C764	1-130-493-00		0.068uF	5%	•	Canadian, E)
C603	1-125-573-11	ELECT (BLOCK) 120	00uF 20	6 71V	C765	1-130-493-00	MYLAR	0.068uF	5%	50V (Canadian, E)
C604	1-106-367-00	MYLAR 0.0	1uF 5%								
C605	1-106-367-00	MYLAR 0.0	1uF 5%	200V	C766	1-161-494-00			. 022uF		25V
					C767	1-124-927-11	ELECT		. 7uF	20%	100V
C606	1-126-860-11	ELECT 330	OuF 20	6 35V	C768	1-124-443-00			00uF	20%	10V
C607	1-126-860-11	ELECT 330	OuF 20:	6 35V	C770	1-124-907-11	ELECT	10	0uF	20%	50V
C608	1-124-478-11	ELECT 100	uF 201	6 25V	C771	1-124-477-11	ELECT	4	7uF	20%	25V
C609	1-124-477-11	ELECT 47u	F 20	6 25V							
C610	1-124-477-11	ELECT 47u	F 20	6 25V	C772	1-124-910-11	ELECT	4	7uF	20%	50V
					C773	1-162-282-31	CEDANIC	4.	OOPF	10%	50V

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	n	Remar
		< CONNECTOR >			,	< TRANSIST	ror >	
* CN102	1-562-573-11	SOCKET, CONNECT	OR 8P	Q301	8-729-140-84	TRANSISTO	R 2SC1841-PAFAEA	
			4P (POWER AMP CONTROL)	Q401	8-729-140-84			
		PIN, CONNECTOR		Q601	8-729-209-15			•
		SOCKET, CONNECT	•	Q701	8-729-140-82			
		PIN, CONNECTOR		Q702	8-729-620-18			
		< DIODE >		Q703	8-729-620-05	TRANSISTO	2SC2603-EF	
				Q704	8-729-620-05			
D301	8-719-815-85	DIODE 1S1585		Q705	8-729-209-15			
D302	8-719-815-85	DIODE 1S1585		Q706	8-729-141-06			
D401	8-719-815-85	DIODE 1S1585		Q707	8-729-141-05		· · · · · · · · · · · · · · · · · · ·	
D402	8-719-815-85	DIODE 1S1585						
D601	8-719-200-80			Q708	8-729-620-05	TRANSISTOR	2SC2603-EF	
				Q709	8-729-119-76			
D602	8-719-312-09	DIODE RBA-402		Q710	8-729-141-46			
D604	8-719-001-94			Q711	8-729-141-37			
D610	8-719-200-80			Q711	8-729-320-97			
D701	8-719-987-63			Q/12	0 123 320-31	1010100011	LOULULIM	
D701	8-719-933-36			0712	8-729-010-96	TDANCICTOR	001101511 0011	
D702	0-719-933-30	DIODE HZS6B1L		Q713				
D703	0_710_015_05	NIONE 101E0E		Q716	8-729-140-84			
	8-719-815-85			Q717	8-729-620-05			
D704	8-719-815-85		(110)	Q718	8-729-620-05			
D705	8-719-987-63		•	Q719	8-729-620-05	TRANSISTUR	2SC2603-EF	
D706	8-719-987-63		(Canadian, E)					
D707	8-719-987-63	DIODE 1N4148M	(US)	Q751	8-729-140-82			
				Q752	8-729-620-18	TRANSISTOR	2SA979-FG	
D708	8-719-987-63		(Canadian, E)	Q753	8-729-620-05	TRANSISTOR	2SC2603-EF	
D709	8-719-987-63		(Canadian, E)	Q754	8-729-620-05	TRANSISTOR	2SC2603-EF	
D710	8-719-987-63		(Canadian, E)	Q755	8-729-209-15	TRANSISTOR	2SD2012	
D751	8-719-987-63	DIODE 1N4148M						
D752	8-719-933-36	DIODE HZS6B1L		Q756	8-729-141-06	TRANSISTOR	2SA1142-QPE	
				Q757	8-729-141-05	TRANSISTOR	2SC2682-QPE	
D753	8-719-815-85	DIODE 1S1585		Q758	8-729-620-05	TRANSISTOR	2SC2603-EF	
D754	8-719-815-85	DIODE 1S1585		Q759	8-729-119-76	TRANSISTOR	2SA1175-HFE	
D755	8-719-815-85	DIODE 1S1585		Q760	8-729-141-46	TRANSISTOR		
D756	8-719-987-63	DIODE 1N4148M	(US)					
D757	8-719-987-63		(Canadian, E)	Q761	8-729-141-37	TRANSISTOR	2SA1684-LK	
D758	8-719-987-63		(Canadian, E)	Q762	8-729-320-97		2SC2921M	
				Q763	8-729-010-96		2SA1215M-0PY	
		< IC >		Q766	8-729-140-84		2SC1841-PAFAEA	
10751				Q767	8-729-900-63			
10/91	0-134-111-08	IC uPC1237HA		Q768	8-729-119-76	TRANSISTOR	2SA1175-HFE	
		< JACK >		Q769	8-729-119-76			
J701	1-565-258-11	JACK, PIN 4P (IN	PUT)			< RESISTOR	>	
		COIL >		R310	1-249-437-11	CARBON	47K 5%	1/4W
			•	R311	1-217-611-00	RES, METAL		
L301	1-420-872-00	COIL, AIR CORE		R312	1-260-072-11		4. 7 5%	1/2W
		COIL, AIR CORE		1	1-247-704-11			1/4W
		•		i	1-260-076-11		10 5%	1/2W
L701	1-420-872-00	JUIL, AIR CORE		Itoro				

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MAIN

													L
Ref. No.	Part No.	Description			Re	mark	Ref. No.	Part No.	Description	_		Remar	·k
R317	1-247-704-11	CARBON	220	5%	1/4W		R744	1-249-428-11	CARBON	8. 2K	5%	1/4W	
R410	1-249-438-11		56K	5%	1/4W		R745	1-249-428-11		8. 2K		1/4W	
R411		RES, METAL PLAT			-,		R751	1-249-417-11		1K	5%	1/4W	
R412	1-260-072-11		4. 7	- 5%	1/2W		R752	1-249-435-11		33K	5%	1/4W	
		OIIIDON	•• •	0.0			R753	1-249-421-11		2. 2K		1/4W	
 ∕ \ R413	1-247-704-11	CARRON	220	5%	1/4W		100	1 210 121 11	OTHE DOT	2. 2.	0.4	1/ 1	
R415	1-260-076-11		10	5%	1/2W		R754	1-249-411-11	CARRON	330	5%	1/4W	
R416	1-249-428-11		8. 2K		1/4W			1-247-704-11		220	5%	1/4W	
ÆR417	1-247-704-11		220	5%	1/4W		<u>∧</u> R756	1-247-704-11		220	5%	1/4W	
			3. 3K					1-249-438-11		56K	5%	1/4W	
R601	1-249-423-11	CARDUN	J. JN	3%	1/4W		R757 R758	1-249-438-11		10K	5%	1/4W	
A DCOO	1 015 000 11	WETAL OVIDE	47	Εœ	3₩	F	R/30	1-245-425-11	CARDON	101	JA	1/4#	
<u></u> R602	1-215-909-11		47	5% 5%		r	D250	1 040 405 11	CADDON	าาห	Γeν	4 /401	
R701	1-249-417-11		1K	5%	1/4W		R759	1-249-435-11		33K	5% 5%	1/4W	
R702	1-249-435-11		33K	5%	1/4W		R760	1-249-426-11		5. 6K	5%	1/4W	
R703	1-249-421-11		2. 2K		1/4W		R761	1-249-435-11		33K	5%	1/4W	
R704	1-249-411-11	CARBON	330	5%	1/4W		R762	1-247-830-11		910	5%	1/4W	
							R763	1-249-412-11	CARBON	3 90	5%	1/4W	
_ R705	1-247-704-11	CARBON	220	5%	1/4W								
 ₹R706	1-247-704-11	CARBON	220	5%	1/4W		_ ₹R764	1-247-692-11		22	5%	1/4W	
R707	1-249-438-11	CARBON	56K	5%	1/4W		R765	1-247-832-11	CARBON	1. 1K	5%	1/4W	
R708	1-249-429-11	CARBON	10K	5%	1/4W		_ R766	1-247-692-11	CARBON	22	5%	1/4W	
R709	1-249-435-11	CARBON	33K	5%	1/4W		∧ R767	1-247-700-11	CARBON	100	5%	1/4W	
							∧ R768	1-247-700-11	CARBON	100	5%	1/4W	
R710	1-249-426-11	CARBON	5. 6K	5%	1/4W							·	
R711	1-249-435-11		33K	5%	1/4W			1-247-713-11	CARBON	1K	5%	1/4W	
R712	1-247-830-11		910	5%	1/4W		⚠ R770	1-247-713-11		1K	5%	1/4₩	
R713	1-249-412-11		390	5%	1/4W		A R771	1-247-719-11		3. 3K		1/4W	
£713 1€R714	1-247-692-11		22	5%	1/4W		<u>∧</u> R772	1-247-745-11		330	5%	1/2W	
\[\frac{1}{1}\n\14	1-247-092-11	CARDON	LL	J/6	1/4"		/\R773	1-247-717-11		2. 2K		1/4W	
D71E	1-247-832-11	CADDOM	1. 1K	E9/	1/4W		2771112	1 247 717 11	CARDON	L. LII	J.6	1/4"	
R715			22	5%	•		A D774	1-249-455-11	CADRON	4. 7	5%	1/4W	
<u>^</u> R716	1-247-692-11				1/4W		<u> </u>				5%	•	
<u>∧</u> R717	1-247-700-11		100	5% 5%	1/4W		<u> </u>	1-249-455-11		4. 7		1/4W	
<u>_</u> R718	1-247-700-11		100	5%	1/4W		R776	1-214-789-00					
<u></u> 1 1 1 1 1 1 1 1 1 1	1-247-713-11	CARBUN	1K	5%	1/4W		R777	1-214-789-00				4 /400	
					4 /400		<u>∧</u> R782	1-247-702-11	CARBUN	150	5%	1/4W	
_ R720	1-247-713-11		1K	5%	1/4W					4011	=	4 (40)	
<u></u> AR721	1-247-719-11		3. 3K		1/4₩		R783	1-249-429-11		10K	5%	1/4W	
<u></u> 1.722 € 1.00 Å	1-247-745-11		330	5%	1/2W		R784	1-260-076-11		10	5%	1/2W	
⚠ R723	1-247-717-11		2. 2K		1/4W		R785	1-260-076-11		10	5%	1/2W	
<u></u> 1 1 1 1 1 1 1 1 1 1	1-249-455-11	CARBON	4. 7	5%	1/4W		R786	1-249-438-11		56K	5%	1/4W	
							R787	1-249-437-11	CARBON	47K	5%	1/4W	
<u> </u>	1-249-455-11		4. 7		1/4W								
R726	1-214-789-00	RES, METAL PLAT	E 0.	1			R788	1-249-441-11	CARBON	100K	5%	1/4W	
R727	1-214-789-00	RES, METAL PLAT	E 0.	1			R789	1-249-430-11	CARBON	12K	5%	1/4W	
 ∕ ₹ R732	1-247-702-11	CARBON	150	5%	1/4W		R790	1-249-438-11	CARBON	56K	5%	1/4W	
R733	1-249-429-11	CARBON	10K	5%	1/4W		R791	1-249-428-11	CARBON	8. 2K	5%	1/4W	
							R792	1-249-429-11	CARBON	10K	5%	1/4W	
R734	1-260-076-11	CARBON	10	5%	1/2W								
R735	1-260-076-11	CARBON	10	5%	1/2W		R793	1-249-429-11	CARBON	10K	5%	1/4W	
R736	1-249-437-11		47K	5%	1/4W		R794	1-249-429-11	CARBON	10K	5%	1/4W	
R737	1-249-425-11		4. 7K		1/4W		R795	1-249-429-11		10K	5%	1/4W	
R738	1-249-425-11		4. 7K		1/4W		R796	1-249-399-11		33	5%	1/4W	
11730	1 243 423 11	Ombon	1. 110	0.0	1/ 111			1-247-741-11		150	5%	1/2W F	
R739	1-249-425-11	CARRON	4. 7K	59	1/4W		R799	1-249-421-11		2. 2K		1/4W	
							RIJJ	1 175 471 11	OUNDOU	L. LI	J/0	1/ 7!!	
R740	1-249-425-11		4. 7K		1/4W								
R741	1-249-425-11		4. 7K		1/4W								
R742	1-249-425-11		4. 7K		1/4W								
R743	1-249-428-11	CARBON	8. 2K	5%	1/4W		1						
							F						

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MAIN	METER	ME	TER SW									
Ref. No.	Part No.	Descrip	tion		Remark		Ref. No.	Part No.	Description			Remark
	,	< RELAY					D161 D162	8-719-304-78 8-719-304-78				
RY703	1-515-790-11 1-515-790-11 1-515-356-00	RELAY ((CENTER SP)						< IC >			
		< TERMI	NAL >				IC102	8-759-917-42 8-759-917-42 8-759-917-42	IC IR2E31A			
			AL BOARD (CHECKE AL BOARD, PUSH 2					8-759-917-42	IC IR2E31A			
*****	*****	******	*****	*****	******				< RESISTOR >			
								1-249-441-11		100K		1/4W
*	1-643-358-11						R102	1-249-407-11		150	5%	1/4W
		*****	***				R103	1-249-407-11 1-249-440-11		150	5% 5~	1/4W
	*	< CAPAC	ITOR >				R104 R105	1-249-440-11		82K 10K	5% 5%	1/4W 1/4W
C101	1-126-163-11	CI CCT	4. 7uF	20%	50V		R151	1-249-441-11	CADRON	100K	E04	1/4W
C101	1-124-261-00		10uF	20%	50V			1-249-407-11		150K	5%	1/4W
C102	1-126-163-11		4. 7uF	20%	50V		R153	1-249-407-11		150	5%	1/4W
C104	1-124-261-00		10uF	20%	50V		R154	1-249-440-11	CARBON	82K	5%	1/4W
C151	1-126-163-11	FIFCT	4. 7uF	20%	50V		R155	1-249-429-11	CARBON	10K	5%	1/4W
C151	1-124-261-00		10uF	20%	50V		******	******	*****	*****	****	*****
C153	1-126-163-11		4. 7uF	20%	50V							
C154	1-124-261-00		10uF	20%	50V		*	1-643-359-11	METER. SW BOARD			
		< CONNE	CTOR >						*********			
* CN101	1-568-848-11	SOCKET.	CONNECTOR 5P						< CONNECTOR >	•		
		< DIODE	•				* CN103	1-564-599-11	PIN, CONNECTOR	8P		
		(DIODE	· /					*	< RESISTOR >			
D101	8-719-304-78		SEL2210R-D									
D102	8-719-304-78		SEL2210R-D				R106	1-249-433-11		22K	5%	1/4W
D103	8-719-304-78		SEL2210R-D				R107	1-249-417-11		1K	5%	1/4W
D104 D105	8-719-304-78 8-719-304-78		SEL2210R-D SEL2210R-D				R108 R109	1-249-427-11 1-249-416-11		6. 8K 820	5%	1/4W 1/4W
D106	8-719-304-78	DIODE	SEL2210R-D				R156	1-249-433-11	CARBON	22K	5%	1/4W
D107	8-719-304-78		SEL2210R-D				R157	1-249-417-11		1K	5%	1/4W
D108	8-719-304-78	DIODE	SEL2210R-D				R158	1-249-427-11	CARBON	6. 8K	5%	1/4W
D109	8-719-304-78	DIODE	SEL2210R-D			1						
D110	8-719-304-78	DIODE	SEL2210R-D						< SWITCH >			
D151	8-719-304-78	DIODE	SEL2210R-D				S101	1-572-816-11	SWITCH, ROTARY	(RANGE	()	
D152	8-719-304-78		SEL2210R-D							*		
D153	8-719-304-78		SEL2210R-D				*****	******	*******	******	****	******
D154 D155	8-719-304-78 8-719-304-78		SEL2210R-D SEL2210R-D									
D156	8-719-304-78	DIODE	SEL2210R-D									
D150	8-719-304-78		SEL2210R-D SEL2210R-D									
D157	8-719-304-78		SEL2210R D SEL2210R-D									
D159	8-719-304-78		SEL2210R-D									
D160	8-719-304-78		SEL2210R-D									
-200						1						

POWER	P.S 2	P.S	SP SW
i		1 3	1 .

							L			
Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Remark
*	A-A3A7-313-A	POWER IC BOAR	n COMPI	FTF (II	77	1 *	1-643-360-11	D C 2 ROARD	(US, Canadian)	
*		POWER IC BOAR	•			·	1 043 300 11		*********	
*		POWER IC BOAR								
	11 1017 020 11	*******	•				1-533-225-11	HOLDER, FUSE	•	
							1 000 220 11	HOLDER, TOOL	•	
		< CAPACITOR >						< CAPACITOR	>	
C301	1-124-927-11	FLFCT	4. 7uF	20%	100V	∆ C901	1-161-744-00	CERAMIC	0. 01uF	400V
C302	1-162-282-31		100PF	10%	50V	2570301	1 101 711 00	OLIUMITO	0. 01at	4001
C303	1-162-287-31		270PF	10%	50V			< CONNECTOR	>	
C304	1-124-910-11		47uF	20%	50V			COMMEDIAN	,	
C305	1-162-195-31		4. 7PF	10%	50V	+ CN901	1-564-321-00	PIN CONNECT	'NR 2P	
0000	1 102 130 01	OLIUMIIO	1. ///	10%	001	į.	1-564-321-21	•		
C306	1-130-491-00	MYLAR	0. 047uF	5%	50V	0.001	1 001 001 01	1111, 001111201	O. L.	
C307	1-124-917-11		33uF	20%	63V			< FUSE >		
C308	1-124-910-11		47uF	20%	50V			(TOOL)		
C311	1-124-917-11		33uF	20%	63V	∕ ∧ F901	1-532-749-11	FIISE CLASS T	UBE 8A 125V (US	Canadian)
C312	1-124-907-11		10uF	20%	50V	7171 301	1 332 743 11	TUSE GEASS I	ODL ON 1234 (U.	o, valiautali)
0312	.1 124 307 11	LULUI	1001	20%	JU 1	*****	*********	******	******	****
C401	1-124-927-11	FLECT	4. 7uF	20%	100V					
C402	1-162-282-31		100PF	10%	50V	*	1-643-363-11	P. S BOARD (E	1	
C402	1-162-287-31		270PF	10%	50V		1 043 303 11	*******	•	
C404	1-124-910-11		47uF	20%	50V				•	
C405	1-162-195-31		4. 7PF	10%	50V		1-533-225-11	HOLDER, FUSE		
0403	1 102 133 31	OLIVERIO	4. 711	10%	301		1 333 223 11	HOLDEIG TOOL		
C408	1-124-910-11	ELECT	47uF	20%	50V			< CAPACITOR	>	
C412	1-124-907-11		10uF	20%	50V					
						∆ C901	1-161-744-00	CERAMIC	0. 01uF	400V
		< CONNECTOR >								
								< CONNECTOR	>	
* CN301	1-562-334-00	SOCKET, CONNE	CTOR 10P							
						* CN901	1-564-321-00	PIN, CONNECT	OR 2P	
		< IC >				* CN904	1-564-321-21	PIN, CONNECT	OR 2P	
						* CN906	1-564-321-00	PIN, CONNECT	OR 2P (E)	
IC301	8-749-900-24	IC STK-4162	MK2			∆ CN908	1-568-106-11	PIN, CONNECT	OR 4P (E)	
		(PEGIOMOD)						/ Hotman on	romon \	
		< RESISTOR >						< VOLTAGE SE	LECTOR >	
R301	1-249-417-11	CARBON	1K	5%	1/4W	∆ CS901	1-572-009-11	SELECTOR, VO	LTAGE (E)	
R302	1-249-438-11	CARBON	56K	5%	1/4W					
R303	1-249-417-11	CARBON	1K	5%	1/4W			< FUSE >		
R304	1-249-438-11	CARBON	56K	5%	1/4W					
R305	1-249-417-11	CARBON	1K	5%	1/4W	1 1 1 1 1 1 1 1 1 1	1-532-350-00	FUSE 4A 250V	(E)	
						♠ F902	1-532-350-00		1.1	
R306	1-249-421-11	CARBON	2. 2K	5%	1/4W					
R307	1-249-421-11	CARBON	2. 2K		1/4W	*****	******	*****	******	*****
R308	1-247-700-11		100		1/4W					
R309	1-247-700-11	CARBON	100	5%	1/4W	*	1-643-356-11	SP. SW BOARD		
R401	1-249-417-11	CARBON	1K	5%	1/4W			*****		
					-	*	1-643-357-11	FRONT SP BOAL	RD	
R402	1-249-438-11	CARBON	56K	5%	1/4W			******		
R403	1-249-417-11		1K		1/4W					
R404	1-249-438-11		56K		1/4W			< JACK >		
R405	1-249-417-11		1K		1/4W					
R406	1-249-421-11		2. 2K		1/4W	J201	1-563-347-11	JACK, LARGE	TYPE (HEADPHONE	(S)
R407	1-249-421-11		2. 2K		1/4W			,		
	-				•					
******	******	******	*******	*****	******					

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SP SW

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	***************************************
R251	1-260-100-11 1-260-100-11 1-260-100-11 1-260-100-11	CARBON 1. 2K 5	% 1/2\\ % 1/2\\ % 1/2\\ % 1/2\\ % 1/2\\ % 1/2\\
		< SWITCH >	
S201	1-572-812-11	SWITCH, ROTARY SLIDE (S	PEAKERS)
		< TERMINAL >	
TM701	1-537-376-11	TERMINAL BOARD (SP)	
******	*****	********	******
		MISCELLANEOUS *********	
* 16	1-643-360-11	WIRE, FLAT TYPE (5 CORE P, S2 BOARD (US, Canadian ADAPTER, CONVERSION 2P)
<u> </u>	1-590-771-11	CORD, POWER (E) CORD, POWER (US, Canadia SWITCH, PUSH (AC POWER)	
Λ Τ901 Λ Τ901 Λ Τ901	1-450-803-11 1-450-804-11 1-450-829-11	TRANSFORMER, POWER (US) TRANSFORMER, POWER (E) TRANSFORMER, POWER (Can	adian)
******	******	********	*****
		S & PACKING MATERIALS	
		STICKER, SONY SYMBOL (1 MANUAL, INSTRUCTION (E,	
	3-754-930-21	MANUAL, INSTRUCTION (EN	
*	4-923-820-01 4-949-874-01	CUSHION INDIVIDUAL CARTON (US, E)
******	*******	********	******

#1		SCREW +BVTT 3X8 (S)	
#2	7_687_561_04	CCDEW +RVTT AVR (C)	

7-682-561-04 SCREW +BVTT 4X8 (S)

7-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S

7-685-650-79 SCREW +BVTP 3X16

7-682-549-09 SCREW +B 3X10

7-621-849-00 SCREW, TAPPING

The components identified by Les composants identifiés mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

#2

#3

#4

#5